Applicant: Harold L. Mantius et al. Attorney's Docket No.: 00414-057001

Serial No.: 09/892,110 Filed: June 26, 2001

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REMARKS

Rejections Under 35 U.S.C. §103

The Examiner rejected claims 1-18, 25-28 and 31-48 as unpatentable over Black (U.S. Patent No. 5,403,604) in view of Gresch (U.S. Patent No. 5,496,577), Strobel (U.S. Patent No. 4,971,813) and Lenoble (U.S. Patent No. 5,908,650). Applicant respectfully traverses these rejections.

In the method of claim 1 and in the method of claim 9 a first and a second portion of a juice is provided. The first portion of the juice is fractioned to yield two fractions: a relatively lower molecular weight sugars and acids-rich juice fraction and a relatively higher molecular weight phytochemical-rich juice fraction. In claim 1, the phytochemical-rich juice fraction is combined with the second portion of the juice used to create the fraction. In claim 9, the acids and sugars-rich juice fraction is combined with the second portion of the juice used to create the fraction. Applicants have amended claim 1 and claim 9 to clarify the fact that a fraction is combined with a second portion of the juice used to create the fraction. Claims 31 and 39, which concern vegetable juice have been similarly amended.

According to the Examiner, Black describes a low sugar juice fraction that "contains higher molecular weight components" and is considered by the Examiner to be a high-molecular weight phytochemical-rich juice fraction. It is not at all clear the low sugar juice fraction described by Black is a phytochemical-rich juice fraction. However, assuming, without admitting that the low sugar juice fraction is phytochemical-rich fraction, the cited references do not render the present claims obvious.

In Black the fraction that the Examiner assumes to be phytochemical-rich is combined with sweetener. Black does not combine a fraction with another portion of the same juice used to create the fraction as required by the present claims.

In Gresch two different fractions of a juice are combined. Gresch does not combine a fraction with another portion of the same juice used to create the fraction as required by the present claims. The Examiner argues that the second stream in Gresch which is "high acid and brix" is not "excluded by the claim language which only requires a second portion of fruit juice,

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but does not state the chemical make up of that juice." However, the second stream described by Gresch, which is actually a juice having a higher acid/sugar ratio and lower sugar content relative to the raw juice, not simply "high acid and brix" juice as stated by the Examiner, does differ from second stream of claim 1 because the second stream of Gresch is a fraction of the original juice, not a portion of the original juice.

Strobel, like Black and Gresch, describes combining two fractions, not a fraction of a juice and another portion of the juice used to create the fraction.

Lenoble is even more remote. Lenoble is concerned with obtaining extracts from rosemary and sage containing glucuronides for use as pigment improving agents.

None of the cited references appear to suggest adding a fraction of a fruit juice back to a second portion of the fruit juice used to create the fraction. Thus, even assuming, without admitting, that Black discloses creating a phytochemical-rich fraction of a fruit juice, there is no suggestion in the cited art to combine such a fraction or any other fraction with second portion of the juice used to create the fraction. Thus, the cited references, no matter how combined cannot anticipate either claim 1 or claim 31. The remaining rejected claims depend directly or indirectly from claim 1 or 31. Thus, none of the remaining rejected claims is rendered obvious by the cited prior art.

The Examiner rejected claims 23, 24, 29, 30, 53, 54, 59 and 60 as obvious in view of Black (U.S. Patent No. 5,403,604), taken with Nelson et al., (Fruit and Vegetable Processing Technology), which describes drying juice products. The primary references have been discussed above. These references do not render obvious the independent claims from which claims 23, 24, 29, 30, 53, 54, 59 and 60 depend. Thus, Nelson et al. cannot render these dependent claims obvious.

In view of the forgoing, Applicants respectfully request that the present rejections under 35 U.S.C. §103 be withdrawn.

New claims 61-64 entail dividing a fruit juice or a vegetable juice into three streams.

One of the three divided streams is treated to create a phytochemical-rich stream and an acids and sugars-rich stream. Each of these enriched streams is then combined with one of the two

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remaining divided streams to produce an enriched juice. Thus, combining the acids and sugarsrich juice stream with one of the two remaining divided streams creates an acids and sugars-rich juice and combining the phytochemical-rich juice stream with the other of the two remaining divided streams creates phytochemical-rich juice. This division of the original juice stream into three streams, two of which can be combined with enriched streams, allows considerable control over the amounts and content of the various juices produced and is well-adapted to high volume production of specialized juices None of the cited references suggests the dividing a juice stream into three juice streams in this manner, fractioning a divided stream to create enriched streams and then combining an enriched stream with one of the original divided streams. In view of this, Applicants respectfully request that new claims 61-64 be allowed.

Enclosed is a Petition for Extension of Time with the appropriate fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

8 MARCH 2005

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